

CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	LD Construction Alternative Practice
Proposed Implementation Date:	Upon Signature
Proponent:	LD Construction
Location:	Belt, MT
County:	Cascade

I. TYPE AND PURPOSE OF ACTION

The Proponent (LD Construction) is Requesting an Alternative Practice to the SMZ Law to salvage additional timber from within the SMZ. The proponent is requesting an alternative practice to Rule 5 (36.11.305) Retention Tree Requirements, and to Rule 4 (36.11.304) Equipment Operation in the SMZ.

According to MCA 77-5-301 through 307, DNRC is authorized to administer and enforce the provisions of the SMZ Law. This Law was developed to protect the public interest of water quality and quantity within forested areas; provide for standards, oversights and penalties to ensure forest practices conserve the integrity of SMZ's; provide guidelines for wildlife management within SMZ's; and allow operators necessary flexibility to use practices appropriate to site-specific conditions in the SMZ. ARM 36.11.301 through 313 further specify the design of SMZ boundaries, allowable activities and prohibitions within the SMZ, penalties and other related provisions.

According to MCA 77-5-304 and ARM 36.11.310, DNRC may approve alternative practices that are different from practices required by the SMZ Law only if such practices would be otherwise lawful and continue to conserve or not significantly diminish the integrity and function of the SMZ.

II. PROJECT DEVELOPMENT

1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED:

Provide a brief chronology of the scoping and ongoing involvement for this project. List number of individuals contacted, number of responses received, and newspapers in which notices were placed and for how long. Briefly summarize issues received from the public.

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2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:

Examples: cost-share agreement with U.S. Forest Service, 124 Permit, 3A Authorization, Air Quality Major Open Burning Permit.

310 Permit from the Cascade County Conservation District may be required. This EA does not analyze for those actions and is not authorizing work within the stream bed.

Should slash be burned a Burn permit of county notification using the HRA system is required.

3. ALTERNATIVE DEVELOPMENT:

Describe alternatives considered and, if applicable, provide brief description of how the alternatives were developed. List alternatives that were considered but eliminated from further analysis and why.

Alternative A: No Action

Alternative B: Action Alternative:

The proposed action is to issue an Alternative Practice for SMZ Rule 4 (36.11.304) Equipment operations would be authorized to harvest inside the 50-foot SMZ, is for one equipment operation incursion into the 50' SMZ of an unnamed class I tributary to Little Belt Creek. Equipment would not be allowed within 35 feet of ordinary high-

water mark. Equipment would use an existing trail that needs improvement, upon completion area would be recontoured, slashed and grass seeded. Excavated Skid trail within the 50' SMZ would be limited to the one skid trail no longer than 100' in the SMZ. On Class three reaches within the project area equipment operation would be allowed no closer than 35' of ordinary high-water mark on slopes less than 20% in an in and out manner. Operations would be limited to times of frozen or dry ground conditions.

Under the Action Alternative an Alternative Practice for SMZ Rule 5 (36.11.305) Removal to below minimum retention tree standards on Class I SMZ would be reduced to 10 trees per 100' foot segment would also be issued.

Additional mitigations and stipulations pertinent to the proposed action alternative will include:

- Slash piles would be placed outside of the 50- or 100-foot SMZ buffer.
- Operation would only occur during periods when soil disturbance can be minimized under conditions are dry or frozen ground to six inches.
- No trees shall be felled in to or across the stream with active water. Any debris from falling or skidding operations that enters the stream must be removed immediately. Any trees that have fallen due to wind or fire across stream with active water shall be retained and not removed.
- All disturbed areas within the SMZ would be grass seeded and have a slash or debris scattered to prevent erosion and sediment from reaching stream segments. Slash and debris will be sufficient to intercept water and be aligned perpendicular to direction of trail.
- No cutting of trees that grew or are growing in the immediate area of the ordinary high-water mark would be allowed.
- Where present leave large diameter logs, minimum of 1 per 100' section of SMZ within the harvest units (large diameter logs defined 15" diameter and 20' long or more). These may be cull logs.
- Only Apply to Parcels owned by Ian Heikkila described as: S26, T19 N, R08 E, ACRES 503.49, LTS 1-8, S2NESW, SESW, NWNW, S2NW. S25, T19 N, R08 E, LTS 2-3-7-8-9.

III. IMPACTS ON THE PHYSICAL ENVIRONMENT

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" if no impacts are identified or the resource is not present.*

4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:

Consider the presence of fragile, compactable or unstable soils. Identify unusual geologic features. Specify any special reclamation considerations. Identify direct, indirect, and cumulative effects to soils.

Alternative A: No Action

Retain trees to the SMZ law, preserve submerchantable trees, no equipment would be permitted to operate within the 50' SMZ buffer.

Alternative B: Action Alternative

Equipment operation would occur within the SMZ on an existing trail, some soil displacement would take place in order to facilitate skidding operations. Slope would be recontoured at the end of operations. Skid Trail would be covered in slash and grass seeded. Other mitigation measures would include operating season restrictions that require ground to be dry or snow covered to eight inches and/or frozen to six inches. In addition, grass-seeding and installation of erosion control measures such as a slash-filter windrow on any disturbed area upon completion of activity would be required. Minimal direct, indirect or cumulative impacts to soil stability and compaction are anticipated due to the operation restrictions and mitigation measures.

5. WATER QUALITY, QUANTITY AND DISTRIBUTION:

Identify important surface or groundwater resources. Consider the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality. Identify direct, indirect, and cumulative effects to water resources.

Alternative A: No Action No equipment operation would be allowed inside the 50-foot SMZ, however timber harvests would still occur.

Alternative B: Action Alternative

The 35-foot equipment exclusion zone would be expected to provide adequate filtration for any displaced soils or increased runoff due to displaced soils outside of the 35 foot equipment exclusion zone. In the area of the 35' exclusion zone the slope is generally flat. Increases in sedimentation would be expected to be minimal and temporary due to operations only occurring on slopes less than 5% and application of mitigation measures. Mitigation measures include imposing seasonal operating restrictions that require snow covered ground to six inches and/or frozen to six inches; and requiring grass seeding and installation of erosion control measures such as a slash-filter windrow on any disturbed area upon completion of operations. DNRC may monitor AP sites to verify effectiveness.

Minimal direct, indirect, and cumulative impacts to water quality and quantity are expected over and above current unharvested condition due to operation restrictions and mitigation measures.

6. AIR QUALITY:

What pollutants or particulate would be produced (i.e. particulate matter from road use or harvesting, slash pile burning, prescribed burning, etc)? Identify the Airshed and Impact Zone (if any) according to the Montana/Idaho Airshed Group. Identify direct, indirect, and cumulative effects to air quality.

Alternative A: No Action

Timber harvest activities will occur in Alternative-A. Slash consisting of tree limbs and tops and other vegetative debris would be piled throughout the project area during harvesting. Slash would ultimately be burned after harvesting operations have been completed. Burning would introduce particulate matter into the local airshed, temporarily affecting local air quality. Over 70% of emissions emitted from prescribed burning are less than 2.5 microns (National Ambient Air Quality PM 2.5). High, short-term levels of PM 2.5 may be hazardous. Burning within the project area would be short in duration and would be conducted when conditions favor good to excellent ventilation and smoke dispersion as determined by the Montana Department of Environmental Quality would burn only on approved days. Thus, direct and indirect, effects to air quality due to slash burning associated with the proposed action would be minimal.

Alternative B: Action Alternative

Additional slash created from harvesting an additional timber consisting of tree limbs and tops and other vegetative debris would be piled throughout the project area. This would create minimal additional slash compared to the No Action Alternative. Slash would ultimately be burned after harvesting operations have been completed. Burning would introduce particulate matter into the local airshed, temporarily affecting local air quality. Over 70% of emissions emitted from prescribed burning are less than 2.5 microns (National Ambient Air Quality PM 2.5). High, short-term levels of PM 2.5 may be hazardous.

Because slash burning and timber harvesting will occur under either alternative direct and indirect, effects to air quality due to slash burning associated with the proposed action would be minimal.

7. VEGETATION COVER, QUANTITY AND QUALITY:

What changes would the action cause to vegetative communities? Consider rare plants or cover types that would be affected. Identify direct, indirect, and cumulative effects to vegetation.

Alternative A: No Action

Additional snags and coarse woody debris would be present, live trees and brush would be retained.

Alternative B: Action Alternative: Live trees may be reduced to 10 trees per 100' section. Some residual damage to vegetation may occur, but it would be minimized to the extent possible

8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:

Consider substantial habitat values and use of the area by wildlife, birds or fish. Identify direct, indirect, and cumulative effects to fish and wildlife.

Alternative A: No Action

Additional Corse Woody debris would be retained on the site and additional snags would be on the landscape for cavity nesters.

Alternative B: Action Alternative

Species that benefit Forest-Riparian edge habitats with a large portion of live standing would have less total area under the action condition. Species that benefit from more open riparian grass and forest would have would benefit. The proposed action would retain bank edge trees, and large diameter down material additionally.

Minor direct, indirect, and cumulative impacts are expected under the action alternative.

9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:

Consider any federally listed threatened or endangered species or habitat identified in the project area. Determine effects to wetlands. Consider Sensitive Species or Species of special concern. Identify direct, indirect, and cumulative effects to these species and their habitat.

A query of the Montana Natural Heritage Program lists 9 species of concern within the township that the proposed action would take place in. Spotted Bat, Eastern Red Bat, Hoary Bat, Veery, Golden Eagle, Brown Creeper, bobolink, and the Clarks nutcracker (See attached list for *Species of Concern*)

Alternative A: No Action

No Action: Additional Corse Woody debris would be retained on the site and additional snags would be on the landscape for cavity nesters.

Alternative B: Action Alternative

West Slope Cutthroat have been identified in the other reaches of Little Belt Creek, however they have not been identified in the within the project area. Due to the size of the proposed action, the mitigation measures, the current conditions minimal direct, indirect, and cumulative impacts are expected under the action alternative.

10. HISTORICAL AND ARCHAEOLOGICAL SITES:

Identify and determine direct, indirect, and cumulative effects to historical, archaeological or paleontological resources.

A systematic inventory of such resources has not occurred. Because the project is not located on state land, the DNRC has no jurisdiction to require landholders to conduct professional level inventories to identify, or develop treatment plans for, privately owned National Register eligible properties.

11. AESTHETICS:

Determine if the project is located on a prominent topographic feature, or may be visible from populated or scenic areas. What level of noise, light or visual change would be produced? Identify direct, indirect, and cumulative effects to aesthetics.

The Proposed project is located on private property far from the view of the general public, adjacent landowners would be able to see the proposed alternative area from parts of their property.

Alternative A: No Action

Timber harvest would occur, but no Alternative Practice would be allowed to the SMZ law.

Alternative B: Action Alternative

Timber harvest would occur, and the proposed Alternative Practice would be allowed to the SMZ law. Due to the size of the proposed action, the mitigation measures, the current conditions minimal to no direct, indirect, and cumulative impacts are expected under the action alternative.

12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:

Determine the amount of limited resources the project would require. Identify other activities nearby that the project would affect. Identify direct, indirect, and cumulative effects to environmental resources.

Alternative A: No Action

No direct, indirect, or cumulative impacts will occur.

Alternative B: Action Alternative

No direct, indirect, or cumulative impacts are anticipated to occur.

13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:

List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, state or federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.

Alternative A: No Action

No direct, indirect, or cumulative impacts will occur.

Alternative B: Action Alternative

No direct, indirect, or cumulative impacts are anticipated to occur.

IV. IMPACTS ON THE HUMAN POPULATION
<ul style="list-style-type: none">• <i>RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.</i>• <i>Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.</i>• <i>Enter "NONE" if no impacts are identified or the resource is not present.</i>

14. HUMAN HEALTH AND SAFETY:

Identify any health and safety risks posed by the project.

Alternative A: No Action

No direct, indirect, or cumulative impacts will occur.

Alternative B: Action Alternative

No direct, indirect, or cumulative impacts are anticipated to occur.

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:

Identify how the project would add to or alter these activities.

Alternative A: No Action

Less timber volume would be harvested. Minimal direct, indirect, or cumulative impacts will occur.

Alternative B: Action Alternative

More timber volume would be harvested. Minimal direct, indirect, or cumulative impacts are anticipated to occur.

16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:

Estimate the number of jobs the project would create, move or eliminate. Identify direct, indirect, and cumulative effects to the employment market.

Alternative A: No Action

Less timber volume would be harvested. Minor direct, indirect, or cumulative impacts will occur.

Alternative B: Action Alternative

An estimated additional 100 MBF of timber would be recovered under the action alternative. Every million-board foot harvested supports approximately 12-18 jobs in the state of Montana¹. The proposed Action alternative would therefore support 1.2-1.8 jobs for the duration of the harvest which is estimated to take 3-6 months. Minor direct, indirect, or cumulative impacts are anticipated to occur.

17. LOCAL AND STATE TAX BASE AND TAX REVENUES:

Estimate tax revenue the project would create or eliminate. Identify direct, indirect, and cumulative effects to taxes and revenue.

Alternative A: No Action

Less timber volume would be harvested. Minimal direct, indirect, or cumulative impacts will occur.

Alternative B: Action Alternative

More timber volume would be harvested. Minimal direct, indirect, or cumulative impacts are anticipated to occur.

18. DEMAND FOR GOVERNMENT SERVICES:

Estimate increases in traffic and changes to traffic patterns. What changes would be needed to fire protection, police, schools, etc.? Identify direct, indirect, and cumulative effects of this and other projects on government services

Alternative A: No Action

No direct, indirect, or cumulative impacts will occur.

Alternative B: Action Alternative

No direct, indirect, or cumulative impacts are anticipated to occur.

19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:

List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.

A 310 Permit may be required for stream crossings. These stream crossing would be applied for with or without the implementation of the Action Alternative.

Alternative A: No Action

No direct, indirect, or cumulative impacts will occur.

Alternative B: Action Alternative

No direct, indirect, or cumulative impacts are anticipated to occur.

¹ Sorenson, C. B., Keegan III C.E., Morgan, T.A, McIver C.P., and Niccolucci, M.J. (2016). Employment and Wage Impacts of Timber Harvesting and Processing in the United States. *Journal of Forestry*, 113 (4) 447-482. Retrieved from <http://www.bber.umn.edu/pubs/forest/workforce/JournalForestryJul2016.pdf>

20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:

Identify any wilderness or recreational areas nearby or access routes through this tract. Determine the effects of the project on recreational potential within the tract. Identify direct, indirect, and cumulative effects to recreational and wilderness activities.

Alternative A: No Action

No direct, indirect, or cumulative impacts will occur.

Alternative B: Action Alternative

No direct, indirect, or cumulative impacts are anticipated to occur.

21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:

Estimate population changes and additional housing the project would require. Identify direct, indirect, and cumulative effects to population and housing.

Alternative A: No Action

No direct, indirect, or cumulative impacts will occur.

Alternative B: Action Alternative

No direct, indirect, or cumulative impacts are anticipated to occur.

22. SOCIAL STRUCTURES AND MORES:

Identify potential disruption of native or traditional lifestyles or communities.

Alternative A: No Action

No direct, indirect, or cumulative impacts will occur.

Alternative B: Action Alternative

No direct, indirect, or cumulative impacts are anticipated to occur.

23. CULTURAL UNIQUENESS AND DIVERSITY:

How would the action affect any unique quality of the area?

Alternative A: No Action

No direct, indirect, or cumulative impacts will occur.

Alternative B: Action Alternative

No direct, indirect, or cumulative impacts are anticipated to occur.

24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:

Estimate the return to the trust. Include appropriate economic analysis. Identify potential future uses for the analysis area other than existing management. Identify direct, indirect, and cumulative economic and social effects likely to occur as a result of the proposed action.

Alternative A: No Action

No direct, indirect, or cumulative impacts will occur.

Alternative B: Action Alternative

No direct, indirect, or cumulative impacts are anticipated to occur.

EA Checklist Prepared By:	Name: Devin Healy	Date: 10/20/22
	Title: Helicopter Manager	

V. FINDING

25. ALTERNATIVE SELECTED:


Alternative A: Action Alternative

26. SIGNIFICANCE OF POTENTIAL IMPACTS:

No significant impacts to the integrity and function of the SMZ will occur with the implementation of operating restrictions and mitigation measures. As proposed, with mitigations, I do not anticipate any significant direct, indirect or cumulative effects from the implementation of the selected alternative. See Section 3 of this document to review mitigation measures.

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

☐ EIS
 ☐ More Detailed EA
 ☒ No Further Analysis

EA Checklist Approved By:	Name: Heidi Crum
	Title: Helena Unit Manager
Signature: 	Date: 10/31/22

**LD Construction
Alternative Practice**
T9N R8E Sections 25 & 26

